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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,786	07/24/2003	Gerd Stahlecker	010971.52513US	8184

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EXAMINER

PATEL, VISHAL A

ART UNIT PAPER NUMBER

3676

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/625,786

Applicant(s)

STAHLECKER, GERD

Examiner

Vishal Patel

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-15, 17, 18 and 20-25 is/are rejected.
- 7) ☒ Claim(s) 7-9, 16 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/24/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. Claims 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10-15, line 1-2, “the sealing surface is arranged **at an** exchangeable part”, this language is unclear because of at an and no --as an--, since as described in the specification and the drawings the sealing surface that forms the third sealing gap is an exchangeable part that is connectable to the sealing element.

Claims 17-18 and 20-21, line 2, “a tube-like area”, this language should be changed to --said tube like area--, because claims 2 has this limitation.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Strub (US. 3,756,673).

Regarding claims 1 and 22: Strub discloses an arrangement *for sealing an opening of a rotor housing in which a vacuum prevails, through which opening a shaft, supported outside of the rotor housing, projects (intended use)*. The arrangement comprising at least two sealing gaps (first sealing gap between the shaft 2 and portion of 13 that is right of S3 and second sealing gap

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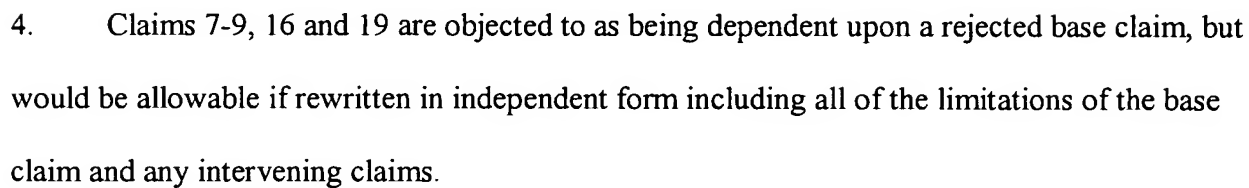
S3), of which a first sealing gap (gap formed between the shaft 2 and portion of 13 that is right of S3) is formed between the shaft (2) and a sealing element free floating (13) and a second sealing gap is formed with a ring collar (ring collar that forms the gap S3) of the spinning rotor bordering on the shaft (2). The second sealing gap is also formed with the same free floating sealing element (13). The sealing element free floating is a unitary sealing element.

Regarding claims 2 and 23: The sealing element comprises a radial flange (radial flange of 13 that contacts 5) and is disposed on an also radially aligned support surface (radial surface of 5) of the rotor housing (housing formed by 1 and 5) and which comprises a tube-like area (tube-like area of the sealing ring that forms the gap S3) arranged at the collar of the shaft.

Regarding claims 3 and 24: The radial flange is pressed to the support surface by at least one spring element (spring element pushing the sealing element toward the support surface, figure 2).

Regarding claims 4-6 and 25: The sealing element comprises an essentially radially extending sealing surface (radial sealing surface) which together with a rear wall (rear wall) of the spinning rotor forms a third sealing gap (gap between the radial sealing surface and the rear wall).

Regarding claims 10-12: The sealing surface is arranged as an exchangeable part, which is connectable to the sealing element (this would be the case since the ring 13 is capable of being replaced and the sealing surface is able to be connect to the sealing element since both are formed as a single member).



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5. Claims 13-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

6. Claims 17-18 and 20-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The invention as claimed and particularly the sealing element comprises an essentially radially extending sealing surface which together with a rear wall of the spinning rotor forms a third sealing gap and the sealing surface is provided with a hollow cylindrical extension which envelopes a cylindrical area of the rear wall. For claims

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kotzur, Lesiecki, Turanskyj et al and Mckenna.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann, can be reached on (703) 306-4115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

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**or faxed to:** 703-872-9326, for formal communications for entry before Final action: or,  
703-872-9327, for formal communications for entry after Final action.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive,  
Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP

August 26, 2004

A handwritten signature in black ink, appearing to read "Vishal Patel". The signature is stylized with a large, looped "V" and a cursive "Patel".

Vishal Patel  
Patent Examiner  
Tech. Center 3600